



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,548	02/08/2001	Takashi Miyazaki	9319S-000175	5686
7590 04/13/2004				
Harness Dickey & Pierce				
PO Box 828				
Bloomfield Hills, MI 48303				
		EXAMINER		
		TON, MINH TOAN T		
		ART UNIT		PAPER NUMBER
		2871		

DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/762,548

Applicant(s)

MIYAZAKI ET AL.

Examiner

Toan Ton

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01/13/04.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 8-13 and 18-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 14-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Prior Art (APA hereinafter) in view of Hida et al (US 593695).

APA discloses a liquid crystal display comprising: liquid crystal sealed between a pair of substrates bonded by a sealing; the sealing section is formed so as to surround liquid crystal with a sealing material and anisotropic conductive material joined to each other.

The limitation not disclosed by APA is at least one of the pair of substrates provided with alignment mark corresponding to the position of the sealing material or the anisotropic conductive material.

The use alignment mark(s) is common and known for accurately aligning the substrates. Hida discloses a liquid crystal display comprising the substrates provided with alignment marks corresponding to the position of the sealing material. Hida discloses that the use of such alignment marks offers advantages such as improved-efficiency, excellent productivity. Therefore, it would have been obvious to one of ordinary skill in the art to employ alignment marks corresponding to the position of the sealing material for accurately aligning the substrates while achieving advantages such as improved-efficiency, excellent productivity

Art Unit: 2871

It is noted “alignment mark corresponding to the position of the sealing material” is an obvious variation (i.e., not patentably distinct) to one of ordinary skill in the art to “alignment mark corresponding to the position the anisotropic conductive material”.

Hida discloses alignment marks formed various shapes such as crisscross, square, L-shaped. Hida discloses that the shapes are varied so as assuring accurate alignment.

Hida discloses that the distance between the alignment marks varies so as assuring accurate and improved alignment.

It would have been at least obvious to one of ordinary skill in the art to employ alignment marks having a width at most equal (equal or less than) a width of the sealing material and the anisotropic conductive material for minimizing interference with the display elements such as display electrodes, liquid crystal material, etc.

### ***Response to Arguments***

3. Applicant's arguments filed 01/13/04 have been fully considered but they are not persuasive.

#### **Applicant's arguments are as follows:**

(1) Hida fails to teach/suggest using alignment marks to proper align relative to a single substrate, but rather discloses relative to pair of substrates.

(2) There is no teaching pertaining particular width, particular shape.

Art Unit: 2871

Examiner's responses to Applicant's arguments are as follows:

(1) Although the claims are interpreted in light of the specification, limitations ("single substrate" addressed in the response) from the specification are not read into the claims.

(2) Hida discloses alignment marks formed various shapes such as crisscross, square, L-shaped, wherein Hida discloses that the shapes are varied so as assuring accurate alignment.

Hida discloses that the distance between the alignment marks varies so as assuring accurate and improved alignment.

It would have been at least obvious to one of ordinary skill in the art to employ alignment marks having a width at most equal (equal or less than) a width of the sealing material and the anisotropic conductive material for minimizing interference with the display elements such as

***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2871

***Contact Information***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan Ton whose telephone number is (571) 272-2303.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 7, 2004

  
TOANTON  
PRIMARY EXAMINER